STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 1026

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of		
Application of Duke Energy Carolinas, LLC,	)	ORDER APPROVING REVISED
for Adjustment of Rates and Charges	)	LIGHTING TARIFFS
Applicable to Electric Utility Service in	)	
North Carolina	)	

BY THE COMMISSION: On September 24, 2013, the Commission issued an Order Granting General Rate Increase (Rate Order) in the above-captioned docket. In Ordering Paragraph No. 29 of the Rate Order, the Commission required Duke Energy Carolinas, LLC (DEC or the Company) to file a new LED-based lighting tariff with the Commission by December 31, 2013. Further, the Commission ordered that DEC consider the issues brought forward by the North Carolina League of Municipalities (NCLM) and the City of Durham in developing this filing.

On December 31, 2013, pursuant to Ordering Paragraph No. 29 of the Rate Order, DEC filed a request for approval to modify its Rate Schedules OL, GL, and PL (collectively, the Rate Schedules) to include a variety of new light emitting diode (LED) fixtures. No other modifications to the Rate Schedules were proposed.

In support of its request, DEC indicated that it was offering LED fixtures for new outdoor lighting installations under Schedules OL and GL. The Company submitted that the new LED options would allow DEC to begin transitioning its standard offering for new lighting away from high pressure sodium (HPS) and metal halide (MH) fixtures. DEC stated that it anticipates significant demand for the new LED lighting fixtures.

DEC stated that it would replace existing mercury vapor (MV) fixtures with new LED fixtures under Schedule OL as the lamps and ballasts fail, or as customers request that MV fixtures be replaced. DEC maintained that customers would prefer an LED replacement rather than a HPS fixture due to the improved quality of light with LED fixtures. Also, Schedule PL, which is closed to new installations, was being modified to allow DEC to replace ballasts and fixtures that fail, or those that the customer requests be replaced, with LED products. DEC further stated that as it develops experience with LED fixtures the Company will evaluate future offerings to replace high pressure sodium fixtures with LED fixtures.

NCLM and several other parties in this docket recommended that DEC develop a customer owned option for all lighting fixtures in addition to new LED offerings. In the Rate Order, the Commission declined to require DEC to implement such an option, but instead requested that DEC consider the positions of the parties regarding customer ownership of lighting fixtures when developing its LED lighting tariff.

On January 23, 2014, NCLM filed comments on DEC's request. NCLM did not object to the specific rates DEC proposed to offer, but requested that the Commission require DEC (a) to meet with municipal customers during the first quarter of 2014 to discuss streetlight rates; (b) to file new rates by July 1, 2014, that would be available for replacement of sodium vapor and MH outdoor lighting fixtures with LED fixtures, would provide a customer ownership option, and would enable municipal customers to benefit from the declining costs of LED fixtures; and (c) to collaborate with NCLM in developing this filing.

On January 24, 2014, the Public Staff filed a response to NCLM's comments in which it discussed the procedure to be followed by the Commission in addressing this matter.

The Public Staff presented this matter at the Commission's Regular Staff Conference on January 27, 2014. The Public Staff indicated that it had reviewed DEC's request for new LED lighting, including the calculations supporting the individual rates and charges associated with the LED fixtures in the Rate Schedules. The Public Staff stated that it supported the Company's proposal to replace failed MV fixtures and ballasts with new LED fixtures because the quality of light associated with LED fixtures should increase customer interest in LED fixtures. The Public Staff further stated that it had communicated to DEC its preference that DEC continue to consider the replacement of other failed lighting fixtures and ballasts with LED fixtures, including replacement of HPS fixtures and ballasts with LED.

In addition, the Public Staff stated that DEC had not proposed to add LED fixtures to Schedule FL. The Public Staff indicated that DEC was considering adding directional-type floodlighting LED fixtures to this schedule. However, because the technology associated with these LED fixtures, as found in Schedule FL, is currently not mature enough to incorporate into a standard offering, DEC was not seeking approval of LED fixtures for flood lighting installations at this time. The Public Staff recommended that DEC develop LED options for Schedule FL as a standard offer lighting utility service option as soon as directional-type LED floodlighting options become viable.

The Public Staff further stated that DEC did not provide for a customer ownership option for LED lighting equipment. The Public Staff indicated that DEC had informed the Public Staff it had considered such an option, but that DEC's research showed that many municipalities were hesitant to own lighting equipment and correspondingly to be responsible for the maintenance of that equipment. The Public Staff stated that DEC indicated a need for additional time to discuss the ownership question with the Public Staff and other interested parties before developing such an option for its lighting services.

The Public Staff recommended that the Commission approve the specific rate offerings proposed by DEC in its filing of December 31, 2013, and that the Commission treat NCLM’s comments of January 22, 2014, as a motion and invite responses from interested parties.

On January 28, 2014, the Commission issued an Order Approving Request and Authorizing Interested Parties to File Comments. The Order granted DEC’s request for approval of new LED lighting options in Rate Schedules OL, GL, and PL. The Order further directed that NCLM’s comments of January 22, 2014, be treated as a motion, and that interested parties be allowed to file comments upon the motion.

On February 10, 2014, NCLM filed a revised motion requesting that the Commission require DEC to take the following actions:

1. By July 1, 2014, file a second LED offering that is available for replacement of HPS and MH lighting.

2. Include in its LED offering a customer ownership option, similar to that offered by Duke Energy Progress, Inc. (DEP).

3. Include in its LED offering a variable rate component that allows the customer to benefit from the declining cost of LED technology, similar to that offered by DEP.

4. Provide the Public Staff and NCLM with energy consumption and cost data used by DEC in developing the LED offering.

5. Meet with municipal customers on a quarterly basis to continue discussions about modernizing DEC's lighting offerings.

The parties filed extensive comments and reply comments on these issues. With regard to the matter of replacing HPS and MH lighting with LED lighting, DEC noted that a key difference between the MV and HPS and MH fixtures is their net book value. Although DEC has recovered the vast majority of its capital costs associated with MV fixtures, this is not the situation with DEC's HPS and MH fixtures. Thus, DEC stated that it hoped to develop a HPS and MH replacement mechanism that accomplishes both the customer's ability to replace HPS and MH with LED and DEC's ability to recover its undepreciated costs of HPS and MH fixtures as they are replaced with LED technology. The Company stated that it was willing to try to find a solution of this issue by July 1, 2014 or, at a minimum, to report on that date as to the status of the Company's efforts and the status of its conversations with municipal and other customers.

On June 18, 2014, after considering the comments and reply comments of the parties, the Commission issued an Order on Public Street Lighting Issues. The Order required, among other things, that on or before July 1, 2014, DEC file a LED offering that is available for the replacement of HPS and MH lights and that DEC share its analysis of such replacements with NCLM in advance of DEC's filing.

On June 26, 2014, DEC and NCLM filed a joint motion requesting that the Commission extend the time for DEC to file the LED offering for 90 days, until October 1, 2014. On June 27, 2014, the Commission issued an Order granting the requested extension of time.

On October 1, 2014, DEC filed a report of its findings regarding the replacement of HPS and MH lighting with LED lighting, and a proposal for the recovery of DEC's undepreciated costs. DEC states that the best means to accomplish these objectives is by creating a transition charge to be paid by the customer that requests the replacement of HPS and MH lighting. DEC further states that a transition charge will minimize the need for a future increase in lighting rates to customers not seeking to replace their HPS and MH fixtures at this time. DEC attached to its filing revised Schedule GL, Schedule OL, and Schedule PL. The Company explains that it revised these schedules to include a transition charge of $78 per fixture for area outdoor lighting (Schedule OL) and $54 per fixture for street and highway lighting (Schedules PL and GL) to replace standard HPS and MH fixtures. In addition, DEC states that LED lights are not available for floodlighting under the Company’s Schedule FL and, therefore, floodlights are excluded from the Company's proposal.

The Company provides the details of the net book value (NBV) analysis that it performed to develop these transition charges. DEC states that the NBV analysis incorporates several assumptions. These assumptions include the timing of the replacements and the types of fixtures that qualify for replacement under the proposed transition charges. DEC states that it has 541,572 area light fixtures with a NBV of $108,462,064, or an average NBV of $200. Further, DEC states that it has 191,457 street light fixtures with a NBV value of $42,006,925, or an average NBV of $219 per fixture. Based on these NBVs, the Company performed various sensitivity analyses making assumptions regarding annual depreciation rates, percentages of fixtures replaced, and the number of years needed for total replacement. The transition charges studied by DEC varied based on the application of different assumptions, such as length of time of conversion and rate of conversion. As discussed in detail in DEC's filing, after considering all of the facts DEC settled on replacement rates and other assumptions that it considers to be reasonable for each type of lighting. However, DEC states that if the actual replacement rates are materially higher or lower than assumed, the Company will conduct a reevaluation in no less than three years to determine whether the transition charges appropriately address the NBV remaining for HPS and MH fixtures. DEC further states that such a reevaluation will be in the interest of all customers because the depreciation occurring during the first three years, as well as the costs defrayed by any early adopters, may support different transition charges in the future.

DEC also notes that the transition charges apply exclusively to standard lighting fixtures. DEC purposefully excluded decorative fixtures from its analysis due to the limited technology to support LED offerings and the potentially higher NBV costs associated with these types of fixtures. However, DEC intends to evaluate a transition charge for decorative fixtures in the future on a project-by-project basis as LED technology evolves. The Company also states that it will continue to explore LED flood lighting availability under its Schedule GL.

Moreover, DEC states that in accordance with Ordering Paragraph No. 17 of the Rate Order the Company is implementing the final step of the phase-in of its monthly charges for new poles and underground service in Schedule GL, Government Lighting Service. This final step makes these charges equal to those in Schedule OL, Outdoor Lighting Service, as ordered by the Commission in the Company's 2009 general rate case in Docket No. E-7, Sub 909. In the Rate Order issued in the present docket, the Commission required that the phase-in be completed no later than December 31, 2014.

Finally, the Company attached a statement of position by NCLM that DEC was authorized to file on behalf of NCLM. In summary, NCLM states that it has no objection to DEC's filing, but that NCLM reserves the right to advocate its position in future rate cases and filings made by DEC on these matters. In addition, NCLM states that it plans to continue working collaboratively with DEC toward the modernization of DEC's lighting program.

Conclusion

The Commission commends DEC and NCLM for their time and effort in working out solutions to these important issues. Their collaborative efforts have resulted in significant progress that will benefit DEC's municipal customers and NCLM's members. Further, the Commission encourages DEC and NCLM to continue exchanging information and working together to find common ground in addressing their interests.

Based on the foregoing and the record herein, the Commission finds and concludes that there is good cause to approve the tariff language specifying the transition charges described above, as shown in Schedule GL, Schedule OL, and Schedule PL filed by DEC as Attachment A. Further, these changes shall become effective on November 1, 2014.

IT IS, THEREFORE, SO ORDERED.

ISSUED BY ORDER OF THE COMMISSION.

This the __10th__ day of October, 2014.

NORTH CAROLINA UTILITIES COMMISSION

Paige J. Morris

Paige J. Morris, Deputy Clerk

Commissioners ToNola D. Brown-Bland, Don M. Bailey, and Jerry C. Dockham did not participate in this decision.